

AN UNUSUAL ASSOCIATION: FIBROEPITHELIAL POLYP AND CONTRALATERAL NEPHROLITHIASIS IN A CHILD*

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SUMMARY: Kızılcın F, Şenocak ME, Göğüş S, Hiçsönmez A. (Departments of Pediatric Surgery and Pediatrics, Hacettepe University Faculty of Medicine, Ankara, Turkey). An unusual association: fibroepithelial polyp and contralateral nephrolithiasis in a child. Turk J Pediatr 1994; 36: 175-177.

A 12-year-old boy presented with fever and flank pain bilaterally. Intravenous pyelogram revealed multiple stones and hydronephrosis in the right kidney and an obstructive filling defect at the left upper ureter. Exploration of the left ureter revealed a fibroepithelial polyp. The presented case was an example of the unreported association between fibroepithelial polyp and contralateral nephrolithiasis. Key words: ureter, fibroepithelial polyp, nephrolithiasis.

Fibroepithelial polyp of the ureter is very uncommon in children, with fewer than twenty cases reported in the literature to date¹. The association between ureteric polyp and ipsilateral nephrolithiasis has been reported², but as far as we know the occurrence of the polyp with contralateral nephrolithiasis has not. The presented case is an example of this unusual occurrence.

Case Report

A twelve-year-old boy was admitted to the hospital with fever and bilateral flank pain of two weeks duration. Medical history revealed right pyelolithotomy which had been performed elsewhere six years prior to admission. The family history was negative with respect to urolithiasis.

On physical examination, it was found that the patient had a fever of 39°C and bilateral costovertebral angle tenderness with otherwise normal findings. Urinalysis showed abundant white blood cells per high power field. An intravenous pyelogram revealed multiple stones and hydronephrosis in the right kidney as well as an obstructive filling defect at the left upper ureter (Fig. 1). The latter could not be demonstrated ultrasonographically.

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In surgery, the left upper ureter was opened, revealing a polyp with dimensions of 0.5 x 1.5 cm and numerous finger-like projections. After excision of the polyp, end-to-end ureteroureterostomy was performed. Removal of the stones from the right kidney was postponed. The postoperative course was uneventful. The histopathological examination revealed that it was a fibroepithelial polyp (Fig. 2).



Fig. 1: Intravenous pyelogram showing obstructive filling defect in the left ureter and contralateral nephrolithiasis associated with bilateral hydronephrosis.



Fig. 2: Microscopic section of the ureteric polyp, made of fibrous stroma, covered by normal transitional epithelium (H + E, x 30).

Discussion

Patients with fibroepithelial polyps usually present with hematuria or flank pain and sometimes urinary tract infection³. The intravenous pyelogram usually reveals an intraluminal, non-opaque, smooth, space-occupying lesion, with a lack of severe upper urinary tract obstruction¹. There is preferential involvement of the left ureter, usually in its upper third and at the ureteropelvic junction⁴.

The differential diagnosis of hematuria and a ureteral filling defect includes ureteral tumors, opaque and non-opaque stones, thrombus and inflammatory lesions. It is difficult to establish a diagnosis of ureteral polyp preoperatively despite preoperative evaluation. A long history of non-specific loin pain, with or without hematuria, accompanied by an intraluminal filling defect detected by intravenous pyelogram is suggestive of a ureteral polyp. However, a stone is the most probable cause of ureteral obstruction, and the possibility of a polyp is seldom considered in the patient with contralateral nephrolithiasis.

An association between fibroepithelial polyp of the ureter and ipsilateral nephrolithiasis is the usual finding². Therefore obstruction, infection and chronic irritation have been proposed as the etiologic factors of the fibroepithelial polyp^{4,5}. Alternatively, fibroepithelial polyp may be the cause of urinary stasis and infection resulting in nephrolithiasis. In contrast, an association between ureteral polyp and contralateral nephrolithiasis has not been reported in the literature. This unusual association may be a coincidental finding in this patient, or ipsilateral small stones may have been passed silently and undetected previously.

Fibroepithelial polyp of the ureter presents a diagnostic challenge because of its rarity. The difficulty in diagnosis increases further when the polyp is associated with ipsilateral or contralateral nephrolithiasis. Therefore, fibroepithelial polyp should be considered as a possible diagnosis in all cases of upper ureteral obstructions.

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